

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	Attorney Docket No. 2004_0215A
Youji NOTOYA et al.	:	Confirmation No. 5638
Serial No. 10/777,063	:	Group Art Unit 2482
Filed February 13, 2004	:	Examiner C. E. Anyikire
MOVING PICTURE CODING METHOD AND MOVING PICTURE DECODING METHOD	:	Mail Stop: AF

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a pre-appeal brief request for review of the rejection of claims 8, 11, 13, 15, and 18-22 as set forth in the Office Action dated June 8, 2011. No amendments are being filed with this request. This request is being filed concurrently with a Notice of Appeal. The request for review is based on the following.

I. Claim Rejections under 35 U.S.C. 102

Claims 8, 13, and 15 were rejected under 35 U.S.C. 102(e) as being anticipated by Hannuksela (US 2003/0138043).

Claim 8 recites (A) a moving picture decoding method for decoding, on a picture-by-picture basis, a coded stream, wherein the coded stream includes ... (iii) a flag inserted into the coded stream so as to indicate a position among the coded picture data where the values of the display order information of the pictures in the coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one, and (B) an information extraction step of extracting the flag indicating a position among the coded picture data where the values of the display order information are non-sequential. Appellants respectfully submit that the above-noted features of claim 8 are not disclosed, suggested, or otherwise rendered obvious by Hannuksela based on the following.

On page 3 of the Office Action, the Examiner appears to rely on paragraph [0056] of Hannuksela as teaching the “flag” and the information extraction step of claim 8. Appellants respectfully disagree that the cited portion of Hannuksela teaches these features of claim 8.

In this regard, paragraph [0056] of Hannuksela teaches that when a user wishes to browse a video sequence at a random point within the video sequence, (i) an initiation image in an independently decodable Group of Pictures (“GOP”) is identified at the random point within the video sequence, and (ii) a number assigned to the initiation image is set to zero so that a decoder may identify the initiation image as the first image frame of a sub-sequence to be processed. Hannuksela teaches that a separate flag may be added to the header field of the initiation image to identify the initiation image as the first image frame such that the decoder may interpret the image numbers correctly and may find the correct image frame that initiates the sub-sequence.

In other words, Hannuksela merely teaches adding a flag to an initiation image frame in order to identify the initiation image frame such that a decoder may easily and correctly process a sub-sequence at a random point within a sequence of image frames, and as such, the “flag” of Hannuksela merely indicates a first image frame to be processed as the starting point for decoding of a video sequence.

However, Hannuksela contains no disclosure of a flag indicating a position among the image data where values of display order information of the image frames are non-sequential, and as such, Hannuksela clearly fails to teach extracting the flag indicating a position among coded picture data where value of display order information of pictures in a coded stream are non-sequential, as required by the information extraction step of claim 8.

In view of the above, Appellants respectfully submit that Hannuksela clearly fails to disclose, suggest, or otherwise render obvious the above-noted features of claim 8. Therefore, claim 8 is patentable over Hannuksela.

Claims 13 and 15 are directed to a moving picture decoding apparatus and a non-transitory computer readable recording medium, respectively, corresponding to the moving picture decoding method of claim 8. Accordingly, Appellants respectfully submit claims 13 and 15 are patentable over Hannuksela for reasons similar to those discussed above with respect to claim 8.

II. Claim Rejections under 35 U.S.C. 103

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hannuksela in view of Teo et al. (US 5,621,464, hereafter “Teo”). Appellants respectfully submit that Teo fails to provide disclosure that would obviate the above-mentioned deficiencies of Hannuksela. Accordingly, claim 11 is patentable over any combination of Hannuksela and Teo based at least on its dependency from claim 8.

Claims 18-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 6,148,140, hereafter “Okada”) in view of Hannuksela.

Claim 18 recites (A) a detecting step of detecting whether values of display order information for pictures to be included in a generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one, and (B) a flag information generation step of generating a flag indicating that the values of the display order information are non-sequential, when said detecting step detects that the values of the display order information for the pictures to be included in the generated coded stream are non-sequential. Appellants respectfully submit that the above-noted features of claim 18 are not disclosed, suggested, or otherwise rendered obvious by any combination of Okada and Hannuksela based on the following.

On page 5 of the Office Action, the Examiner appears to indicate that Okada teaches the “flag” and the flag information generation step of claim 18. In particular, the Examiner relies on the disclosure of Okada at Col. 26, Lines 46-64 to teach these features of claim 18. Appellants respectfully disagree that the cited portion of Okada teaches the “flag” and the flag information generation step of claim 18.

In this regard, Okada is directed to a method of seamlessly linking a plurality of video streams (e.g., video objects or “VOBs”). The disclosure of Col. 26, Lines 46-64 of Okada defines “seamless linking information” used during the reproduction of VOBs in an AV file. In particular, the seamless linking information is information which enables the consecutive reproduction of a plurality of VOBs in an AV file to be performed seamlessly, and the seamless linking information includes a seamless flag showing whether an instant VOB corresponding to instant seamless linking information is reproduced seamlessly following the end of reproduction of a previous VOB positioned immediately before the instant VOB in the AV file.

It is noted that Okada teaches that in order for the seamless flag to indicate that reproduction of the instant VOB is performed seamlessly with the previous VOB, the following relationships between the previous VOB and the instant VOB must be met: (1) both VOBs must use the same display method (e.g., NTSC, PAL, etc.) for the video stream as given in the video attribute information; and (2) both VOBs must use the same encoding method (e.g., AC-3, MPEG, Linear-PCM) for the audio stream as given in the audio attribute information (Col. 26, Line 65 - Col. 27, Line 6).

In other words, the seamless flag taught by the cited portion of Okada merely indicates whether the previous VOB and the instant VOB satisfy a condition for seamless reproduction that

both the VOBs use the same display method and the same encoding method, and as such, the seamless flag taught by Okada is clearly unrelated to indicating a display order of VOBs. Accordingly, Okada clearly fails to teach generating a flag indicating that values of display order information for pictures to be included in a generated coded stream are non-sequential, as required by the flag information generation step of claim 18.

Additionally, on page 6 of the Office Action, the Examiner acknowledges that Okada fails to teach that “the values of the display order information for the pictures to be included in the generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one.” However, the Examiner relies on paragraphs [0093]-[0095] of Hannuksela as teaching that “the values of the display order information for the pictures to be included in the generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one.”

Based on the Examiner’s comments in the Office Action, Appellants note that it is unclear as to whether the Examiner believes that the “flag” generated by the flag generating step of claim 18 is taught by Okada, by Hannuksela, or by some combination of Okada and Hannuksela.

In addition to above arguments demonstrating that Okada clearly fails to teach the flag generating step of claim 18, Appellants respectfully submit that the cited portion of Hannuksela fails to disclosure that would obviate the above-mentioned deficiencies of Okada (i.e., the cited portion of Hannuksela fails to teach the “flag” and the flag generating step of claim 18).

In this regard, paragraphs [0093]-[0095] of Hannuksela discloses a method of “sliding windowing” for image frame buffering in which the last M image frames that were coded are stored in a buffer to be used as reference images for coding. Hannuksela teaches it is preferable to index the stored M image frames in a specific order in connection with motion compensation. However, Hannuksela acknowledges that the image frame number may include gaps, which a decoder will typically interpret as errors and attempt to reconstruct the image frames interpreted as lost, and as such, Hannuksela requires that an encoder is capable of informing the decoder that the discontinuities in the image numbering are intentional.

In other words, the cited portion of Hannuksela merely teaches discovering the discontinuities in the image numbering and relaying the discontinuities to the decoder. However, Hannuksela fails to teach representing the discontinuities using a different type of information, e.g., representing the discontinuities using a flag indicating a position among the image data where values of display order information of the image frames are non-sequential. As such, Hannuksela clearly

fails to teach generating a flag indicating that values of display order information for pictures to be included in a generated coded stream are non-sequential, as required by the flag information generation step of claim 18.

Further, Appellants note that any combination of Okada and Hannuksela would, at best, teach modifying the seamless reproduction method of a video sequence taught by Okada using the method of reproducing a sub-sequence of a video sequence at a random point designated by a user taught by Hannuksela. However, as neither Okada nor Hannuksela provide any disclosure related to generating a flag indicating that values of display order information for pictures to be included in a generated coded stream are non-sequential, Appellants respectfully submit that any combination of Okada and Hannuksela clearly fails to teach the “flag” and the flag generating step of claim 18.

In view of the above, Appellants respectfully submit that any combination of Okada and Hannuksela fails to disclose, suggest, or otherwise render obvious the above-noted features of claim 18. Accordingly, claim 18 is patentable over any combination of Okada and Hannuksela.

Claims 19 and 22 are patentable over any combination of Okada and Hannuksela based at least on their dependency from claim 18.

Claims 20 and 21 are directed to a moving picture coding apparatus and a non-transitory computer readable recording medium, respectively, corresponding to the moving picture coding method of claim 18. Accordingly, Appellants respectfully submit that claims 20 and 21 are patentable over any combination of Okada and Hannuksela for reasons similar to those discussed above with respect to claim 18.

III. Conclusion

In view of the foregoing, Appellants respectfully submit that claims 8, 11, 13, 15, and 18-22 are patentable over the prior art of record. Accordingly, reconsideration of the rejection set forth in the final Office Action is respectfully requested.

Respectfully submitted,

Youji NOTOYA et al.
/Stephen W. Kopchik/
By 2011.08.31 15:27:17 -04'00'

Stephen W. Kopchik
Registration No. 61,215
Attorney for Appellants

SWK/vah
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
August 31, 2011